UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,652	10/17/2001	Russell M. Krapf	A0762	8126

35219 7590 08/04/2009

WESTERN DIGITAL TECHNOLOGIES, INC.
ATTN: LESLEY NING
20511 LAKE FOREST DR.
E-118G
LAKE FOREST, CA 92630

EXAMINER	
MCGAHEY, CHRISTOPHER S	
ART UNIT	**PAPER NUMBER**
2421	

MAIL DATE	DELIVERY MODE
08/04/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/982,652	KRAPF ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER S. MCGAHEY	2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-48,81 and 83* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-48,81 and 83* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 30 April 2009 have been fully considered but they are not persuasive. The Applicant's chief argument concerns the Examiner's use of Plotnick et al. (U.S. Pub. No. 2002/0178447) as prior art. The Applicant correctly asserts that only subject matter disclosed both in '447 and in U.S. Provisional 60/281,037 may be considered prior art to the instant Application. This is the case because only '037 has a date (3 April 2001) that precedes the filing date of the Application (17 October 2001). The Applicant argues that neither '447 nor '037 discloses or enables the following limitations as recited by claims 1 and 25:

> "receiving a first signal from a viewer control interface indicating a viewer command to the audiovisual system, wherein the audiovisual system is responsive to the viewer command by initiating a corresponding action selected from the group consisting of: fast-forwarding the selected broadcast stream, pausing the selected broadcast stream, replaying the selected broadcast stream, and performing a program search;" and
>
> defining a viewer profile of the viewer of the display based on the viewer command."

The Examiner respectfully disagrees and maintains that both '447 and '037 disclose the cited limitations. First, since '447 explicitly incorporates '037 by reference (¶0001 of '447), the entirety of '037 is prior art to the instant Application. Second, the cited limitations contain a Markush group: "fast-forwarding the selected broadcast stream, pausing the selected broadcast

stream, replaying the selected broadcast stream, and performing a program search." (See MPEP §2173.05(h).) Therefore, the prior art need only disclose, at minimum, one member of the group in order for the entire claim to be rejected. Third, '037 explicitly discloses the first element of the Markush group. Specifically, '037 discloses:

> receiving a first signal from a viewer control interface indicating a viewer command to the audiovisual system (last paragraph of page 1; Figure 1, "remote control"), wherein the audiovisual system is responsive to the viewer command by fast-forwarding the selected broadcast stream (section K on page 21, last sentence of ¶2), and defining a viewer profile of the viewer of the display based on the viewer command (section K on page 21, particularly paragraphs 2 and 3).

Therefore, Plotnick clearly anticipates the aforementioned limitations recited by claims 1 and 25.

The Examiner acknowledges that one of the members of the aforementioned Markush group (i.e., "performing a program search") is not anticipated by or obvious in light of Plotnick. However, Alexander et al. (US 6,177,931), which is cited as pertinent prior art in the Conclusions section below, clearly reads on this limitation and could be used either by itself or in combination with Plotnick to reject claims 1 and 25. Therefore, the Examiner advises against amending these claims so as to remove the other three Markush group members, leaving only "performing a program search." See the Conclusions for further details.

2. On page 3, second full paragraph, of the Applicant's Remarks, filed 30 April 2009, the Applicant traverses "each and every implicit and/or explicit official notice" appearing in the

Office Action of 18 February 2009. This Action employed official notice in the 103(a) rejections of claims 12-14 and 36-38. In response, the Examiner has provided references for each of these rejections. Please see the full analyses and rejections below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims **1-4**, **6-11**, **17-21**, **24-28**, **30-35**, **41-45**, **48**, **81**, and **83** are rejected under 35 U.S.C. 102(e) as being anticipated by Plotnick et al. (US 2002/0178447).

Regarding claim **1**, Plotnick discloses "a method for displaying a targeted advertisement to a viewer of a display of an audiovisual system in conjunction with displaying a broadcast stream on the display, the method comprising:

a. selecting a broadcast stream (¶0064, lines 5-9; ¶0070, lines 9-10);

b. displaying the selected broadcast stream on the display (¶0063, lines 1-4);

c. receiving a first signal from a viewer control interface indicating a viewer command to the audiovisual system (¶0091, lines 1-4; ¶0109, lines 1-3; see also 60/281,037 incorporated by reference, last paragraph of page 1 and

Figure 1; Plotnick ¶0001), wherein the audiovisual system is responsive to the viewer command by initiating a corresponding action selected from the group consisting of: fast-forwarding the selected broadcast stream (see 60/281,037 incorporated by reference, section K on page 21, last sentence of ¶2; Plotnick ¶0001), pausing the selected broadcast stream, replaying the selected broadcast stream, and performing a program search (¶0063, lines 1-4; ¶0109, lines 3-5, "VCR-like controls of the PVR");

d. defining a viewer profile of the viewer of the display based on the viewer command (¶0109, lines 5-8, 12-13; ¶0110, lines 1-4; ¶0111, lines 3-5; see also 60/281,037 incorporated by reference, section K on page 21, particularly paragraphs 2 and 3; Plotnick ¶0001);

e. selecting a first advertisement from a plurality of stored advertisements based on the viewer profile of the viewer of the display (¶0105-107; ¶0112, lines 1-6); and

f. displaying the first advertisement on the display (¶0112, lines 6-8)."

As to claim **2**, Plotnick discloses "the method of Claim 1, further comprising:

g. updating the viewer profile based on a second signal received from the viewer control interface (¶0110, lines 5-12);

h. selecting a second advertisement from the plurality of stored advertisements based on the updated viewer profile (¶0105-107; ¶0112, lines 1-6); and

i. displaying the second advertisement on the display (¶0112, lines 6-8)."

As to claim **3**, Plotnick discloses "the method of Claim 2, further comprising transmitting the updated viewer profile to a head end (¶0117)."

As to claim **4**, Plotnick discloses "the method of claim 2, wherein step (g) comprises:

i. receiving a second signal from the viewer control interface indicating a viewer command to the audiovisual system, wherein the audiovisual system is responsive to the viewer command indicated by the second signal by initiating an action selected from the group consisting of: recording the first advertisement, specifying how the first advertisement is displayed on the display (¶0122, lines 9-16; ¶0123, lines 3-10), and replaying the first advertisement (emphasis added); and

ii. updating the viewer profile based on the second signal received from the viewer control interface (¶0123, lines 3-10)."

Claims **6** and **7** essentially repeat claim 1 (e.g., "replaying the selected broadcast stream" of claim 6 and "initiating a program search" of claim 7) and are thus analyzed and rejected on the same basis at claim 1.

As to claim **8**, Plotnick discloses "the method of Claim 2, wherein steps (h)-(i) are repeated until a third signal received from the viewer control interface indicates a positive viewer reaction or until a predetermined period of time has elapsed (Figure 12; ¶0124)."

As to Claim **9**, Plotnick discloses "the method of Claim 1, further comprising transmitting the viewer profile to a head end (¶0117)."

As to claim **10**, Plotnick discloses "the method of Claim 1, wherein step (e) comprises:

i. displaying an identification of at least one of the stored advertisements including the first advertisement on the display (¶0085, lines 1-8; see also 60/281,037 incorporated by reference, last two paragraphs of page 23; Plotnick, ¶0001); and

ii. receiving a second signal from the viewer control interface selecting the first advertisement to be displayed on the display (¶0085; see also 60/281,037 incorporated by reference, last two paragraphs of page 23; Plotnick, ¶0001)."

As to claim **11**, Plotnick discloses "the method of Claim 10, wherein step (e)(i) comprises displaying an identification of at least one of the stored advertisements including the first advertisement via a menu on the display (¶0085, particularly line 6; see also 60/281,037 incorporated by reference, last paragraph of page 23; Plotnick, ¶0001)."

As to claim **17**, Plotnick discloses "the method of claim 1, wherein the broadcast stream is a television broadcast stream (¶0070, lines 9-10)."

As to claim **18**, Plotnick discloses "the method of claim 1, wherein the broadcast stream is a cable broadcast stream (¶0069, lines 1-6; ¶0073, lines 4-5)."

As to claim **19**, Plotnick discloses "the method of claim 1, wherein the broadcast stream is a satellite broadcast stream (¶0069, lines 6-7; ¶0073, lines 4-6)."

As to claim **20**, Plotnick discloses "the method of claim 1, wherein the broadcast stream is an Internet broadcast stream (¶0070, lines 4-6)."

As to claim **21**, Plotnick discloses "the method of Claim 1, wherein step (d) comprises defining a viewer profile of a plurality of viewers of the display based on a plurality of signals received by a controller indicating usage of a viewer control interface by the plurality of viewers (¶0110 and 0111), and step (e) comprises:

i. determining an individual viewer profile for a viewer viewing the display at a current time (¶0112, lines 1-3); and

ii. selecting the first advertisement from the stored advertisements based on the individual viewer profile of the viewer of the display at the current time (¶0112, lines 3-6)."

As to claim **24**, Plotnick discloses "the method of Claim 1, further comprising storing the plurality of advertisements on a hard disk drive (item 136, Figure 1; ¶0066, lines 1-6; ¶0068, lines 3-8; ¶0080, lines 6-11)."

Claim **25** is identical to Claim 1 with the exception that a non-targeted ad is first displayed, followed by a targeted ad. The choice of targeted ad is made based on the viewer's response to the first non-targeted ad (e.g., fast-forwarding, pausing, replaying, or performing a program search). Plotnick clearly discloses all of these limitations (¶0123-0124; ¶0127, lines 1-5; Figure 12, where ad A1 is the non-targeted ad; see also 60/281,037 incorporated by reference, section K on page 21, particularly paragraphs 2 and 3; Plotnick ¶0001).

Dependent Claims **26-28**, **30-35**, **41-45**, and **48** are identical to dependent claims 2-4, 6-11, 17-21, and 24 with the exception that the present claims depend on independent claim 25 rather than on independent claim 1. Given the similarity of claims 1 and 25, the present claims are analyzed and rejected on the same bases used for claims 2-4, 6-11, 17-21, and 24 above.

As to claim **81**, Plotnick discloses "the method of Claim 4, wherein specifying how the first advertisement is displayed on the display comprises an action selected from the group consisting of: fast forwarding the first advertisement, displaying the first advertisement without modification, and pausing the first advertisement (¶0123, lines 3-10)." (emphasis added)

As to claim **83**, Plotnick discloses "the method of Claim 28, wherein specifying how the first advertisement is displayed on the display comprises an action selected from the group consisting of: fast forwarding the first advertisement, displaying the first advertisement without modification, and pausing the first advertisement (¶0123, lines 3-10)." (emphasis added)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims **5** and **29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Plotnick et al. (US 2002/0178447) as applied to claims 2 and 26 above, and further in view of Swix et al. (US 6,718,551).

Regarding claim **5**, Plotnick discloses the method of claim 2, but does not explicitly disclose updating the viewer profiled based upon the viewer "initiating a purchase of a good/service."

Swix teaches a system very similar to Plotnick's. Furthermore, Swix teaches updating a viewer profile based at least in part on "services a customer has purchased or used over interactive television, such as video on demand" (Column 7, lines 52-61). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Plotnick in light of Swix's teaching so that the viewer profile might better reflect the viewer's preference for interactive goods and services, and so that advertisers might thus better target ads to potential customers.

As to claim **29**, Plotnick discloses the method of Claim 26, but does not explicitly disclose updating the viewer profiled based upon the viewer "initiating a purchase of a good/service." The present claim is analyzed and rejected on the same basis used for claim 5.

2. Claims **12-14** and **36-38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Plotnick et al. (US 2002/0178447).

Regarding claim **12**, Plotnick discloses the method of Claim 10, but does not explicitly disclose the further claimed limitation "wherein step (e)(i) comprises displaying an identification of at least one of the stored advertisements including the first advertisement via a banner on the display."

In a section of Plotnick other than that cited above, Plotnick discloses displaying target ads as an "underlay" beneath the credits of a program (see 60/281,037 incorporated by reference, section I on page 20; Plotnick ¶0001). The Examiner interprets Plotnick's "underlay" as a type of banner on the display. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to display the ads and menus discussed in section N of Plotnick's '037 as underlays so that user could thereby select upcoming ads as the credits were rolling in a concluding program.

Claim **36** is analyzed and rejected on the same grounds as claim 12.

As to claim **13**, Plotnick discloses the method of claim 10, but does not explicitly disclose the further claimed limitation "wherein step (e)(i) comprises displaying an identification of at least one of the stored advertisements including the first advertisements via an icon on the display."

In a section of Plotnick other than that cited above, Plotnick discloses displaying targeted "bugs" in a corner of the viewing screen (see 60/281,037 incorporated by reference, section G on page 20; Plotnick ¶0001). The Examiner interprets Plotnick's "bugs" as a type of icon on the display. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to display the ads and menus discussed in section N of Plotnick's '037 as "bugs" so that the user could thereby select the ads to be displayed during the next avail.

Claim **37** is analyzed and rejected on the same grounds as claim 13.

As to claim **14**, Plotnick discloses the method of Claim 1, but does not explicitly disclose that the first advertisement is displayed "immediately prior to displaying a second broadcast stream on the display." Plotnick *does* disclose displaying a stored advertisement "when an ad insertion opportunity arises" (¶0112). However, Plotnick is silent as to how many ads may be shown between first and second broadcast streams.

Official Notice is taken that ad insertion schedules vary from broadcaster to broadcaster and from program to program. As an example, sporting events often have ad insertion opportunities that cannot be planned for in advance, as might occur when a sporting team calls an unexpected timeout. In these instances, there may be time for only one 30-second or 60-

second ad to be displayed before rejoining the game. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to ensure that Plotnick could exploit ad insertion opportunities where only one commercial time slot is provided, as might occur, for example, during sporting events.

In further support of this Official Notice, Plotnick discloses a method for creating ad insertion opportunities in programming where none previously existed (see 60/281,037 incorporated by reference, first 5 paragraphs of page 19; Plotnick ¶0001). Furthermore, Plotnick may create ad insertion opportunities of any length (e.g., 10 seconds). Therefore, from Plotnick alone, it would be obvious to one of ordinary skill in the art at the time the invention was made to display a targeted ad immediately prior to displaying a second broadcast stream on the display. This would be done, for example, when it was desired to not interrupt the flow of the programming being displayed (see 60/281,037 incorporated by reference, paragraphs 4 and 5 of page 19; Plotnick ¶0001).

Claim **38** is analyzed and rejected on the same grounds as claim 14.

3. Claims **15**, **16**, **22**, **23**, **39**, **40**, **46**, and **47** are rejected under 35 U.S.C. 103(a) as being unpatentable over Plotnick et al. (US 2002/0178447) as applied to claim 1 above, and further in view of Hite et al. (US 5,774,170).

Regarding claims **15** and **16**, Plotnick discloses the method of Claim 1, but does not explicitly disclose either (a) displaying the targeted advertisement in a time slot adjacent to the

time slot for a regularly scheduled ad (claim 15) or (b) displaying the targeted ad in place of a regularly scheduled ad (claim 16).

Hite teaches a broadcast stream that has both preemptable and non-preemptable commercials (Column 7, line 64 – Column 8, line 17). Thus, when a preemptable time slot is adjacent to a non-preemptable time slot, situation (a) results. When a single preemptable time slot is present, situation (b) results. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to ensure that Plotnick's system included both preemptable and non-preemptable commercial time slots a la Hite. This would have been done so that advertisers could use non-preemptable commercials to reach all viewers, regardless of their personal viewing preferences.

As to claims **39** and **40**, Plotnick discloses the method of Claim 25, but does not explicitly disclose either (a) displaying the targeted advertisement in a time slot adjacent to the time slot for a regularly scheduled ad (claim 15) or (b) displaying the targeted ad in place of a regularly scheduled ad (claim 16). The present claims are analyzed and rejected on the same basis used for claims 15 and 16.

As to claim **22**, Plotnick discloses the method of Claim 21, but neither explicitly discloses nor precludes the further claimed limitation "wherein step (e)(ii) comprises selecting the first advertisement from the stored advertisements based on the individual viewer profile of the viewer of the display at the current time and based on content of the selected broadcast stream." (emphasis added)

Hite teaches transmitting a special code along with certain broadcast programs to ensure that inappropriate commercials are not displayed during these programs (Column 6, lines 52-59; Column 7, lines 31-33, "context"). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Plotnick in light of Hite's teaching so that broadcasters could retain some degree of control over what types of advertisements are displayed during broadcast programs.

As to claim **46**, Plotnick discloses the method of Claim 45, but neither explicitly discloses nor precludes the further claimed limitation "wherein step (e)(ii) comprises selecting the first advertisement from the stored advertisements based on the individual viewer profile of the viewer of the display at the current time and based on content of the selected broadcast stream." (emphasis added) The present claim is analyzed and rejected on the same basis used for claim 22.

Claims **23** and **47**, like claims 22 and 46, involve basing an advertisement selection on both a viewer profile and the content of the selected broadcast stream. Thus, the present claims are analyzed and rejected on the same basis used for claims 22 and 46.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Alexander et al. (US 6,177,931) teaches a targeted ad method and system in which a

viewer profile is based on, inter alia, program searches performed by viewers (Column 29, lines 12-55). Therefore, Alexander is of particular relevance to independent claims 1 and 25.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER S. MCGAHEY whose telephone number is (571)270-5670. The examiner can normally be reached on Monday-Friday, 7:30am-5:00pm; alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John W. Miller/
Supervisory Patent Examiner, Art Unit 2421

/CHRISTOPHER S MCGAHEY/
Examiner, Art Unit 2421